



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/779,626

02/18/2004

Yukio Kokuzawa

396.43512X00

9089

20457

7590

01/27/2006

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-3873

EXAMINER

MAHONEY, CHRISTOPHER E

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/779,626

**Applicant(s)**

KOKUZAWA ET AL.

**Examiner**

Christopher E. Mahoney

**Art Unit**

2851

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 18, 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 9, 13 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 2-4, 6-8, 10-12, 14-16, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (U.S. Patent No. 5,513,036). Watanabe teaches a Fresnel lens sheet 6 comprising a Fresnel lens substrate 14 whose surface 18/20 of the light source side has a rugged structure combined with a lenticular lens sheet 5 (figure 3) for use in a rear projection screen 2 (in figure 1). Additionally light diffusing particles (in layer 24) may make up the Fresnel lens. The applicant is directed to review figures 1, 3, and 22-26 as well as col. 18, lines 10-58 and col. 19, lines 6-14. Watanabe discloses the claimed invention except for an average pitch of 200µm or smaller and a ten point roughness of 3-15µm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an average pitch of 200µm or smaller and a ten point roughness of 3-15µm for the purpose of utilizing an optimum range. The applicant should note that it has been held that where the general working conditions of a claim

Art Unit: 2851

are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (U.S. Patent No. 5,513,036) in view of Kamiya (U.S. Patent No. 6,663,953). Watanabe teaches the salient features of the claimed invention except for a copolymer of methacrylate and styrene. Kamiya teaches in col. 3, lines 46-60 that it was known to produce a Fresnel lens from a copolymer of methacrylate and styrene. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a copolymer of methacrylate and styrene, for the purpose of utilizing readily available materials. The applicant should note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

#### ***Allowable Subject Matter***

Claims 2-4, 6-8, 10-12, 14-16, 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17-18 and 24-25 are allowed.

#### ***Response to Arguments***

Applicant's arguments filed November 2, 2005 have been fully considered but they are not persuasive. The applicant argues that Watanabe does not teach a rugged structure and

Art Unit: 2851

suggests that Watanabe is silent with respect to the entrance surface. Watanabe does teach a rugged structure for the entrance surface in figures 22, 23, and 26. The specification [col. 18, lines 23-26] states that the “incident light side surface 18 of the base film 14A is processed to a matted surface 18 to diffuse light, by *roughening* the surface of the base film 14A...” [emphasis added]. The applicant further argues that Watanabe does not address the problem of ghosting. Col. 18, lines 10-11 discuss how the “stray light deteriorates the picture quality as double images or a rainbow image.” The double image is an example of ghosting. Kamiya is not used to teach the surface structure since Watanabe has already been applied to that feature. Kamiya is simply applied to show that the screen may be made up of a copolymer of methacrylate and styrene.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For example, Ishikawa teaches a surface roughness of from 0.1 $\mu$ m to 5.0 $\mu$ m.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2851

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'C. E. Mahoney', is positioned above the printed name.

Christopher E Mahoney  
Primary Examiner  
Art Unit 2851